From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: PaulKB8N@aol.com
Subject: [2045] ATUs, Delta and Losses (QQ, Jan 96)
Message-ID: <951230235232_102695994@mail02.mail.aol.com>

Congratulations to L. B. Cebik, W4RNL, on his excellent article in Jan 96 QQ. I'd like to offer a few thoughts as an addendum to his discussion. I will tell you up front that I am a fan of the Pi-Net design, which, if designed correctly, can provide matching to a wide variety of loads at high levels of efficiency. I am also a harsh critic of the Capacitive Tee network, even though, in limited situations, it provides high matching efficiencies. I'd like to limit my discussion to those two, because, as the article clearly shows, the other designs (with the exception of the inductive Tee, which is challenging to construct and tune) are lower efficiency designs.

NATURE OF THE FILTERING ACTION: Both the Pi and Cap-Tee networks can be thought of as a type of bandpass filter. Unfortunately, the Cap-Tee serves primarily as a high-pass filter. In fact, it could probably be renamed the Ultimate High-Pass Filter. This can be scary, even at QRP levels, because harmonics and parasitics above the operating frequency are not suppressed. I'm sure many QRPers could qualify for the 1000M/watt award for low level parasitics and harmonics that are "received" by VCRs, televisions, and stereos. The Pi-Net, however, acts as a true bandpass filter, and attenuates spurs above and below the operating frequency. I can operate my two radios at 100W on adjacent bands with no co-interference, despite open feeders and my 4 antennas that are stuffed into my 55'x70' back yard, thanks to using the Pi-Nets.

LIMITATIONS RESULTING FROM CIRCUIT Q: The article reinforces that circuit Q is important and that using the minimum amount of L will result in the highest efficiencies. My experience has shown that you cannot "overbuild" a Pi-Net tuner. I recommend that the critical current path, i. e. the series inductor, be constructed of as heavy duty material as is available and as the enclosure space allows. High quality #16 or larger wire should be used for wiring and the inductor. I personally use #12 silver-plated copper in the construction of my tuners. I might add that the input side of the Pi-Net should typically contain the high-voltage components, while the output side should contain the high-current components for greatest efficiency. I therefore would recommend that the tap shown in Figure 1 in the subject article should come from the input side rather than output side, unless you plan on using heavy-duty strap and a high-current connection to the coil. I have had great success in being able to use smaller wire and alligator clips when coming from the input side.

LOAD CONDITIONS USED FOR THE CALCULATIONS: The article uses primarily high-impedence load conditions of 150 + - j100. These conditions point to the low efficiency of the Cap-Tee against capacitively reactive loads, but does not mention its notoriously bad efficiency at low impedence levels

(especially complex loads). This point was brought out in articles in QST over the past year. While extremely low and high impedence conditions stretch the limits of most tuning networks, the Pi design is much more efficient over a wide variety of loads.

DESIGN FLEXIBILITY: The Pi-Net, besides its overall efficiency, offers some design flexibility. With variable capacitors in short supply, very small (10-100pf) capacitors can be paralleled with 100pf mica "range extender" fixed capacitors through a simple switch to provide additional range. Care must be taken, however, to ensure quality components and wiring are used to maintain a high circuit Q.

Overall, the Pi-Net provides an effective bandpass design, with high efficiency over a wide range of impedences. Under some conditions, the Cap-Tee will show show a smaller Delta, but that can be overcome in the Pi-Net through good design and conservatively rated components. I have tried many different tuner designs, and I keep coming back to the Pi-Net for sheer efficiency, simplicity, and flexibility.

Frankly, it scares the hell out of me when new tuner designs are introduced as the panacea for matching balanced and unbalanced loads under a wide range of loading conditions. Let them subject their circuit to the kind of analysis done in this article. Years ago, we all thought that the SPC and Ultimate Transmatch designs were the answer, but the numbers show otherwise! Again, congratulations to W4RNL for,as always, an excellent technical presentation!!   73, Paul, KB8N

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: rsm@halcyon.com (Robert Marlan)
Subject: [2042] correction on JIM CATES address
Message-ID: <v02130501ad0ba4bd0f6a@[198.133.235.24]>

My computer beeped at me...

I believe the correct zip code for Jim Cates is
95821 *not* 95841, as listed in the St. Louis Announcement,
and in Chuck's reprint of it on the mailing list. If my information
is incorrect please let me and the list know!

Thanks

Bob Marlan KA6NOC/7
rsm@halcyon.com

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: bachmann@ari.net
Subject: [2082] email callsign server
Message-ID: <199601010040.TAA22973@mtolympus.ari.net>

Hi Gang,

This is my first posting....always just enjoyed reading.

I noticed that alot of folks ask for addresses...like for the St. Louis Tuner.
Even if you don't have a callbook or CD ROM you can use email callsign server.
You can also add your email address to the callsign database as mentioned
in the reply below from the callsign server.

You can get any address using the callsign, by emailing a message to:
                                lookup@qrz.com
For the example below, the body of the message (NOT the subject) would have:
                                lookup wa6ger
as the only text. You will quickly get the reply below:

On Thu, 28 Dec 1995, QRZ E-MAIL Callsign Server <lookup@qrz.com> wrote:
>Thank you for using the QRZ callsign e-mail server.
>Below is the information on the callsign(s) that you requested.
>
> Callsign: WA6GER
>   Name: JAMES W CATES
>   Addr1: 3241 EASTWOOD RD
>   Addr2: SACRAMENTO CA   95821
>   Country: USA
>   Class: General
> Effective: 16 Aug 1988
>   Expires: 16 Aug 1998
>   Born: 18 May 1926
>
>Thank you for using the QRZ e-mail callsign server.
>The complete QRZ callsign database is available on CDROM
>for a variety of computer systems including Windows,
>UNIX and Mac. To find out more, send an e-mail to
>
>info@qrz.com
>
>Or, try out our web page at:
>

>http://www.qrz.com
>
>If you would like to add your e-mail address to the database,
>send an e-mail to updates@qrz.com with a message that
>looks like the following using your callsign and address:
>
>qrz_email W1ABC user@email.com
>
>--------------------------------------
>73 from QRZ
>

73's
Rich Bachmann, N3SLR

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Geoffrey Geduld <ggeduld@frontier.canrem.com>
Subject: [2067] Finding Plessey SL6270
Message-ID: <301295.005959.2787@frontier.canrem.com>

>Fellow QRPer's
>
>I'm in search of a source for the elusive Plessey SL6270 IC used in the
>Cascade. I've searched the general vicinity and called all my
>favorite parts suppliers in the country, and I can't find a source.
>Can anyone alert me to a source, and a phone number. I need one
>bad, and a couple spares given the difficulty I've had in getting
>just one.
>
>Tnx, de WO7T/QRP
>
>Mark
>
>Mark_E_Gustoff@ccm.ch.intel.com
>

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: jsbraun@vivanet.com
Subject: [2064] FS: Ten Tec Scout w/ accessories
Message-ID: <9512311254.aa05543@vivanet.vivanet.com>

I have for sale a Ten Tec Scout 555 w/ noise blanker installed and the following

accessories:

Matching Power Supply model #937
Band Modules: 80m, 40m, 20m, and 10m
Ten Tec Hand Microphone model #700c
Mobile Mounting Bracket model #296

All Items are in "mint" condition with original Boxes, and manuals...Only used in shack and never mobile.

All totals over $800
I am asking $625 or best offer
If interested please call me at (716) 367-9826

Thanks / 72's
de Scott
KB2GWF

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: David Adams <dave@flowserver.stem.com>
Subject: [2053] It had to happen
Message-ID: <9512310849.AA20019@flowserver.stem.com>

Well...After two years in this apartment complex (and only a bit longer as a ham), I have received my first TVI complaint....and I was at qrp (ish) levels (ssb at less than 10 watts...need to calibrate the meter). 15m is the big problem...the only other thing that causes problems is 40, and I keep that below 5w which alleviates that problem.

I guess it's time to gather up the interference pamphlets and offer to help solve the filtering probs...but this is not going to be fun... this lady hates us. OUr fault I spose...They are in the apartment below us so whenever our three year old is on the balcony and manages to knock over a plant or something, the spillover hits their patio. (She isn't actually allowed out there anymore, of course, but the lady downstairs has a long memory...the glass of water brittany spilled on her patio (bare concrete mind you...within a couple hours of it raining anyway) seems to have ticked her off)...ah well this should be fun...anyone have any particular recommendations for approaching the tvi problem?

Dave
/

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: RICHQRP@aol.com
Subject: [2048] LIST
Message-ID: <951231002357_27768633@mail02.mail.aol.com>

I would like to know about and where is our Qrp-L web page???thanks rich
wd6fdd

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: wayneb@on-ramp.ior.com (wayne barnhart)
Subject: [2049] low power
Message-ID: <m0tWGe2-000RuDC@on-ramp.ior.com>

Well there be good news and bad news. The bad news is that I am only getting
1.8 watts out of my HW-8 on 20M which means that someday I am going to have
to go into the thing and blow the cobwebs out. The good news is that it
dosnt seem to matter, people can still hear me. Today I got a 339 from
California and a 559 from the St. Louis area. But that not be the entire story.

I finally got off my duff and measured my acient coax (about 20 yrs old).
There be 100ft of the stuff (RG8) because I never had the heart to cut it.
At 14 MHz there should be about .6dB loss. I am running about 3.5dB loss.
You want to talk about ugly. Well, with the .1 watt reflected and the coax
eating up about half the power, I figure I be putting about .5 watt to the
antenna. On the other hand its still making noise so...

Also, I intend on ordering a NW8020 for 20M next week so maybe I leave the
HW-8 as it is. The way I see it, in another 20 years maybe it will qualify
for QRPp...   :)

Was wondering though. I don't see foam breaking down that much. Also,
eventhough the coax is old it hasn't seen continous service in the
environment for all those years. You think if I cut about 5 ft off of each
end and put on new connectors I could reduce the losses. I ask because I be
to lazy to go out and try.

Oh. Some have asked about my tag line. Before I started studying electronics
I was a Biologist but there be little to no work for such so I be back in
school. Many critters like dirt, therefore biologist like dirt. Dirt is good.

Later

Wayne Barnhart WB7WHI   Dirt is good!
Spokane, Wa.

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Jeff Gold <JMG@tntech.edu>
Subject: [2058] Mizuho, maybe for sale
Message-ID: <01HZGBJIDSPK9FPGYI@tntech.edu>

Hi,

may need to do another money gathering.. so considering selling
this:

All in excellent condition working and physically-

Mizuho MX-14S, 20 meter HT, SSB/CW

-optional noise blanker
-leather case
-whip antenna
-cigarette lighter power adapter/charger
-fliter-CW2S
-power cable
-hand mike
-belt clip
-extra crystals (14.00-14.050, 14.200-14.250 installed)
     .14X-05S,14.050-14.100
     .14x-10S,14.100-14.150
     .14x-15s, 14.150-14.200

if you check the last selling price. adds up to quite a lot of
accessories.

73

Jeff,AC4HF

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: tdrumm@sparc.isl.net (Tony Drumm)
Subject: [2074] Mouse keyer lives

Message-ID: <199512312052.OAA23454@sparc.isl.net>

Well, I got a Curtis keyer chip and went to RS to gather the other associated components to build the keyer circuit in my '94 ARRL handbook. I tore apart my old mouse, removed all the components for the junk box (never know when you'll need tiny resistors). The mouse had three buttons and it died just because the left switch went bad. I moved the right switch to the left most position. I sawed the circuit board in half to make room for the new keyer.

I breadboarded the keyer on one of those white experimenter's boards for ICs and it worked fine (with some component subs - couldn't find everything at RS exactly to the number). I then transfered it to a small board that has a space for a DIP plus some lands and holes to interconnect. Took my time and tried it. But, alas, NG. It would come on and stay on. It would cycle with the dots and dashes then either stay on or off. If off, it would turn back on in a few seconds. Frustrating!

I had enough components (except for the IC) to build a duplicate so I rebuilt it on the white breadboard and moved the chip over. Again, it worked fine. Arg! So I rebuilt it on a spare board and after some initial debugging, got it working. Still don't know what's wrong with the original - anyone have any ideas?

Since I removed all the mouse parts, I was able to easily use the original mouse wires for power and key connections. Drilled a hole in the bottom to access the speed pot, another in the side for a key-on toggle switch. I still like the idea of using a CMOS keyer and surrounding the mouse with buttons like a jet stick.

Anyway, it works so I'm pleased. Now I just have to get used to keying this way! (I'm still not proficient with "real" paddles.) I think this will pack up and go with me to camp nicely.

One other note. I've read plenty of times descriptions of Curtis A vs B modes but I can't keep them straight. My "main" keyer is a CMOS Super Keyer II. I initially wired the mouse for mode A but the first time I tried keying CQ, I got a K instead of a C. Switched it to mode B and got C as I expected.

Best wishes to everyone in 1996!
Tony Drumm
internet: tdrumm@sparc.isl.net
Packet: aa0sm@wd0gnk.#semn.mn.usa.na

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [2078] N.E.-QRP-C.(1996 CALENDAR)
Message-ID: <199512312234.RAA04361@dartvax.dartmouth.edu>

Hello Gang,

1996 promises to be a great yrear for the New England QRP club.

Here are a list of events for the comming year.

February through March,   79er Sprint contest

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Roy Boggs <rboggs@pcc-uky.campus.mci.net>
Subject: [2079] New England QRP Club
Message-ID: <199512312254.RAA21714@pcc-uky-01.campus.mci.net>

I appreciate the posting by Ernie Gregoire which tells how to get club info;
however I've email-ed a request for info three times and still haven't got a
response. What the heck's going on? Norcal, would you like a new member from KY?

72 es cu all tonite on SKN, Roy

     Roy Boggs KE4KDT   QRP-L #322
     Prestonsburg, KY   rboggs@pcc-uky.campus.mci.net

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: JKXM17A@prodigy.com (ALLEN SMITH)
Subject: [2073] OHR WM-1
Message-ID: <091.07663382.JKXM17A@prodigy.com>

I just completed the Oak Hills Research qrp wattmeter. The kit arrived
late friday evening, December 22nd. All parts were accounted for and the
construction completed by the next day.

It was very easy to construct and alignment requires only a digital
multi-meter. The finished product looks and works great. For anyone out
there who may need a qrp watt meter I recommend this one for consideration.

For all of you out there on the list who already know about the WM-1 please

excuse my enthusiasm.

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Mike.Czuhajewski@bbs.abs.net (Mike Czuhajewski)
Subject: [2077] QRP Show in Laurel MD???
Message-ID: <1995Dec31.170555.15174@abs.net>

Looks like it's time for another QRP Show and Tell in Laurel, MD, sponsored by the Maryland Milliwatts. We do these on a random, erratic basic, totally aperiodic, and feels like time for another. A complication is that Md Radio Center, where we always had them, has gotten rid of the ham radio library room and converted it into another sales area, albeit with lots of floor space open. (They're moving into a smaller place in the future, with no room for the library.) We think we might be able to talk him into letting us use it for another show--we could reclaim some of the tables by moving the consignment sale gear to the corners. If anyone is interested, let me know and we'll start planning a date (assuming we can talk Jerry, the owner, into doing another one). It would probably be in early February or very late January.
BTW, Laurel is halfway between Washington DC and Baltimore and the store is easy enough for out of towners to find. (And the new location will be even easier.) 73 and Queue Our Pea DE WA8MCQ
wa8mcq@bbs.abs.net
--
Mike Czuhajewski, user of the UniBoard System @ abs.net
E-Mail: Mike.Czuhajewski@bbs.abs.net
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: af852@rgfn.epcc.Edu (William R Colbert)
Subject: [2056] QRP+ keying
Message-ID: <9512311500.AA05597@rgfn.epcc.Edu>

Ref my posting a few days ago concerning the keying problems with the QRP+ when using an outboard keyer. Thanks to all that have replied with similar experiences. I did speak with Bruce at Index this past week and he advised he was aware of the keying problem, although he did not expect it to be as great a problem as it is. Bruce said that he has written a resolution to this problem which he had created to solve another

more pressing keying problem. This new software change will allow for keying up to at least 45 wpm with an external keyer. The other problem I was experiencing when trying to use my external keyer was apparantly caused by spikes on the keying line, which can be corrected by installing a reverse connected diode such as a 1N4148 on the manual keyline (for external keyers with a small +/- voltage such as Heathkit 1410, etc). Per Bruce, if the problem persists on the mike/keyer lines, bypass with a small value cap. I have not tried the cap solution as I don't have a mike for the unit and probably won't, so I don't expect any problem with the mike circuit. HNY, 72/73 to all. Ray, W5XE

--
Ray Colbert, W5XE/V31XE, El Paso, Tx

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Rick Zabrodski <zabrodsk@med.ucalgary.ca>
Subject: [2050] rare canadians on this weekend
Message-ID: <Pine.SUN.3.91.951230224958.4463B-100000@ume>

If You are looking to work all provinces and territories QRP, the time is now! RAC winter contest is on till Dec 31, 2359 UTC. Both CW and SSB. Americans send RS/RST and serial number. I worked the Yukon VY1 on 160 with 10 watts this evening....a first for me. (140 foot inverted L helps) Will give a call on or about QRP freq from time to time.
72 and 73 in 96 to all from the Frozen North....eh!

Dr. Rick Zabrodski BSc, MD, CCFP(E) * VE6GK
Clinical Assistant Professor * NorCal 519 ARCI 7650 GQRP 8329
Faculty of Medicine, Univ. of Calgary * "Power is no substitute for skill"

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: af840@rgfn.epcc.Edu (Chris W Brakhage)
Subject: [2070] sale
Message-ID: <9512311923.AA08990@rgfn.epcc.Edu>

Hi qrp/homebrewers;
I am cleaning my shack and have following for sale:

Man. # Discr. Cond. Yr. $$$

```
-----------------------------------------------------
Fluke 8920A  True RMS Voltmtr.        Good 1986   250
Philbrick PR300 Power Supply +/- 15V  Good         75
Tek 455      Oscilloscope             Good        250

Please send a offer to email AF840@RGFN.EPCC.EDU
    Happy New Year Chris es 73 WB5FKC ..
```

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: k7yha@ix.netcom.com (Richard H. Arland)
Subject: [2075] Sierra Stuff
Message-ID: <199512312058.MAA02901@ix5.ix.netcom.com>

Well, I have had my Sierra on the air for a couple of days and worked some medeocre DX with it, and must say that I am really impressed with the design, ease of construction and the responses from QRP Bob at Wilderness.

In a side-by-side, A-B comparison with my ARgo 515, the Sierra seems to be as sensitive if not more so than the Argo. The excellent Xtal filtering in the IF makes it more of a CW machine than the 515 with the optional 2.4 kHz 8-pole filter installed. I have to use the external AF/notch filter (model 208-A) on the 515 to approach the selectivity of the Sierra.

I am truly amazed at the operational characteristics of the rig. In a long QSO with Fran, KA3WTF, about 2 miles away, on 40 last nite, he commented that the transmitter sounded the better than any other rig he has heard me use at the shack. Knowing Fran, this is quite a statement. The CW note is very nice and the shaping seems to be just right.

Now I have to get the 30 and 20 meter modules built and aligned then start the mods, with the first mod being a S/RF meter. I think that I will keep the ABX control on the main PC board instead of remoting it to the front panel. With the ABX control at midpoint, the sensitivity seems to be the way I like it. If I need a tighter IF bandwidth I can always pop the top or add an external AF filter.

I use a preamplified R-S speaker on the Sierra and it literally fills the room with sound.

Happy New Year to all!

72/73 rich

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Dale Hall <102603.30@compuserve.com>
Subject: [2065] SKN
Message-ID: <951231181521_102603.30_HHU37-1@CompuServe.COM>

Would someone please remind me of what time SKN starts. Answer to me as I get the digest.

de Dale KB0WZ QRP-L 148

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Dale Hall <102603.30@compuserve.com>
Subject: [2081] SKN
Message-ID: <951231234553_102603.30_HHU45-1@CompuServe.COM>

Well, after 6 answers to my inquiry about SKN, maybe I ought to thank everyone and prepare to actually work SKN. :) I have worked SKN before but just did not remember the start time. I thought it was only a few hours long. Good thing I asked. :)

de Dale KB0WZ #148

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: bobhigh@primenet.com (Bob Hightower)
Subject: [2076] SKN Rules and Forms
Message-ID: <199512312159.OAA15990@usr4.primenet.com>

Thanks to Chuck for giving us the info on getting the rules and forms, but the address should be info@arrl.org, not .txt.
73,
Bob KI7MN NorCAl #1228, qrp-ARCI #8918, qrp-l #271

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Ken.H@cyberbury.net
Subject: [2063] subscribe
Message-ID: <199512311752.MAA07629@nss2.CC.Lehigh.EDU>

unsubscribe ken.h@cyberbury.com

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Tom Bowman <tbowman@nbn.net>
Subject: [2068] Tejas Gell Cell charger
Message-ID: <199512311836.NAA82851@nss2.CC.Lehigh.EDU>

-- [From: Tom Bowman * EMC.Ver #2.5.02] --

Thanks to all who responded to my question about the low float voltage I've been measuring out of my Tejas charger. i finally got a chance to take the charger apart and found trimpot R7 measured 400 ohms, not the specified 500 ohms. Sure wish I would have measured that pot when I was assembling the charger....

With all 400 ohms cranked into the circuit, I was only seeing about 13.2 VDC across a fully-charged battery.

The cure was simple: I broke the PC board path and added a 150 ohm, 1/2 watt resistor between R7 and the base of the 7805 regulator. Now I've got an easy 13.5 volts output for the float voltage.

That 13.5 VDC float voltage is critical, one list reader said, to maintain the health of gell cells.

One other note about the 7805: When building the Tejas charger, I mounted my 7805 UNDER the PC board and heat sinked (sank??) it to the case using a mica insulator to keep the 7805 above cabinet ground. Made more sense to me then using a heatsink attached to the 7805 tab.

Best wishes to all on qrp-l for a fine New Year.....

--
Tom Bowman, WA3REY, tbowman@nbn.net

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: "Alfred D. Jablonski" <alfredd@mail.erols.com>
Subject: [2059] Telefuncken Radio tubes
Message-ID: <199512311612.LAA07514@mail.erols.com>

My mom lives in Pheonix and her Telefuncken radio tubes need to be replaced. Where can she go? Or where can she order the 5-6 tubes?
Thanks!

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: wdzeares@ix.netcom.com (W. Dennis Zeares)
Subject: [2069] Thanks to everyone...
Message-ID: <199512311908.LAA10581@ix5.ix.netcom.com>

I just want to say thank you to everyone on the list that have answered my questions and helped me get back on the air after cancer surgery. As of now I am a cancer survivor and hope to continue for a long while. Hi! I really appreciate the spirit of everyone and I am thankful I found this group. Everyone is so encouraging and helpful. I have now become a member and received #357. Hope to work as many of you as possible on 20M and 40M. 72 and Happy New Year, Dennis K3ETS, Dallas, Texas

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Byron8LCZ@aol.com
Subject: [2066] TVI
Message-ID: <951231133307_102985877@emout04.mail.aol.com>

Hi Dave,

By the time, someone has reported the TVI problem to you, they have already suffered long enough to get really mad, then it took awhile to trace the problem to you.

I would start by moving the antenna outside, away from the building. Inside antennas are always a problem, since you're 5 watt signal is so much stronger then the TV station being received. You might also try different polarizations, like a vertical or small loop antenna. AEA, MFJ. But get it as far away from your tv leadin as possible. Most apartments are on cable these days, so you're signal is probably being picked up by the cable and sent to every one in your building. If only one neighbor has tvi, she might be using rabbit ears. Then you're really in trouble, even with an outside antenna.

Most apartment dwellers are young people with loud stereos or retired folks with no money for cable, so they use rabbit ears. You're five watt signal will always overload their TV.

When I lived in an apartment, I had the same problem, the lower floor always gets it worst then the second floor (where I lived). Although I made some pretty good QRP contacts back then with a dipole in the hallway between the front door and the bedroom.

Next give your phone number (this is optional, of course) to your neighbor and ask her to call you if she has any further problems. If someone else is

causing any TVI, you want her to know that too. If she reports the TVI to the building manager, you could be evicted and she's already mad as hell. She sees you as violating her right to watch TV. You can also make use of mobile and portable operations much more. Many hams operate mobile/portable every day that live in apartments. its a way to get your hamming in, without causing problems at home. Make sure you arent radiating any power on a harmonic freq, low pass filters are good for this. a antenna tuner can also help attenuate unwanted harmonics. I gave up operating from my apartment back in 1981, even though i was QRP. Its just too close to too many TV sets. It took the fun out of it. Its time to get creative. Good luck.

The important thing, is to get it resolved as soon as possible. Every day, she has to live with TVI, the problem will get worst.

So far in my house, in 3.5 years, i have never had a TVI complaint yet. And I'm on the air every day. Knock on wood-like-substitute ! I'm not exactly antenna stealthy either, with a 25 ft vertical on the chimney.

Move into a house as soon as you can, its a good deal, but get a big enough back yard for antennas and no power lines criss crossing your yard. The money you'll save on mortgage interest can pay for that new rig and antenna very quickly. Apartment rent keeps going up every year, a mortgage payment stays the same for the life of the loan.

72, Byron WA8LCZ Detroit

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Stephen Trier <sct@po.cwru.edu>
Subject: [2044] W8EDU projects page
Message-ID: <199512310443.XAA10965@slc5.INS.CWRU.Edu>

I recently browsed the QRP-L web page -- wow, nice work! There's a lot of good stuff in there.

The small ham projects page I maintain is still alive, though it is in a new home. (Wouldn't you know it? Two weeks after the URL made QST, I had to move the page. Murphy would be proud.)

The new location is as follows:

    http://inswww.ins.cwru.edu/misc/w8edu/projects/

The material on the page is mostly snarfed from rec.radio.amateur.homebrew and QRP-L. I haven't had time to read r.r.a.* for over a year, though, so I have probably missed recent projects from there. My goal is to create

an archive of projects that were published on the 'Net, sort of like what one would have in back-issues of _SPRAT_ or in the W1FB _Notebook_ series. I grab any project article I see that is interesting (subjectively) and that has reasonably complete construction information. I then ask the author for permission to put the project up on the web.

There are ~20 projects in the collection. Organization is negligible. :-) There aren't any links to other project-related web pages because I haven't had the time to web-surf for them. Someday, maybe... :-(

Please use and enjoy!

72 es 73,
Stephen

--
Stephen Trier KG8IH
sct@po.cwru.edu

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: faunt@netcom.com (Doug Faunt N6TQS +1-510-655-8604)
Subject: [2052] [reasoner@dimensional.com: d7 power source]
Message-ID: <199512310731.XAA03872@netcom13.netcom.com>

This was posted on another mailing list, but the batteries sound interesting for portable QRP operation.

73, doug

From: Marc Reasoner <reasoner@dimensional.com>
Subject: d7 power source
From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: [2054] Re: ATUs, Delta and Losses (QQ, Jan 96)
Message-ID: <Pine.PMDF.3.91.951231063035.541067879A-100000@utkvx.utk.edu>

Paul,

Many thanks for the kinds words on the article. I wanted to introduce the readers to the overlooked but very useful concept of delta and worried about already overusing the pages of QQ. However, anyone interested can verify your observations about the limitations of any of the ATU networks by running a few low impedances through the program and seeing the pattern of what I call root network efficiency (which does not

account for losses from component deficiencies, connectors, wiring, case proximity, etc.). HAMCALC 12 is the current version available from VE3ERP and has an updated version of ZL1LE's program on board.

Back in the final days of tube amplifiers, PI networks were discouraged for ATU use due, apparently, to the difficulty of obtaining capacitors with the requisite capacitance and power ratings. However, well-constructed capacitors suitable for QRP power levels are more or less easily available, and that strike against PIs is now only a pass ball.

I can only reaffirm your remarks about sustaining component Q throughout tuner construction and minimizing strays, especially to the metal walls of tight cases.

I hope you will be sure Ron Stark gets a copy of your observations, as is or extended. Many readers of QQ are not on this list and deserve to read your remarks. Perhaps I am a little less critical of the C-L-C Tee, since I believe in advance filtration to suppress harmonics without relying on the ATU. However, although not compact, an L-C-L Tee is a low pass network ATU. High Q variable inductors permit hitting the low-delta tuning combinations, and a plexiglass case eliminates case strays. See the next issue of <72> for some ideas on this design. In any ATU network, a variable inductor is as important as a variable capacitor for hitting the most desirable matching values. Switched inductor values, in this regard, are always compromises, although circumstances may dictate their use.

Thanks again for the observations and the kind words.

-73-
LB, W4RNL

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [2057] Re: correction on JIM CATES address
Message-ID: <199512311514.PAA16656@chuck.dallas.sgi.com>

Bob,

Yep, his zip is 95821. It is wrong in QRPp. To err..... A. Pope

dit dit
--
Chuck Adams (K5FO CP-60) adams@sgi.com
Box 181150, Dallas, TX 75218-8150

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: "C. J. Hawley Jr." <hawley@aries.scs.uiuc.edu>
Subject: [2055] Re: It had to happen
Message-ID: <30E69A8E.6E3B@aries.scs.uiuc.edu>

David Adams wrote:
>
> Well...After two years in this apartment complex (and only a bit longer
> as a ham), I have received my first TVI complaint....and I was at
> qrp (ish) levels (ssb at less than 10 watts...need to calibrate the
> meter). 15m is the big problem...the only other thing that causes
> problems is 40, and I keep that below 5w which alleviates that
> problem.

I think the 3rd harmonic of 15M comes in right at channel 3 or so. That's the channel also used for a lot of VCR to TV hookups. I would try a really effective low pass filter like the ones made by ICE. Maybe switch her stuff to channel 4 if that applies. Usually you get to decide 3 or 4 depending upon local usuage. Filter her TV line cord with a big toroid (about 10 turns of the cord thru a 2 inch #73 or 77 ferrite toroid). All my fundamental overload in the house gets in thru the linecord. I boosted the cable signal with an amp and just about eliminated the problem, because the tv automatic gain goes down with a strong signal and thus the TV becomes less susceptable to interfering signals.

Chuck, KE9UW

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: charles1@netcom.com (charles copeland)
Subject: [2061] Re: It had to happen
Message-ID: <199512311655.IAA15405@netcom11.netcom.com>

> Well...After two years in this apartment complex (and only a bit longer
> as a ham), I have received my first TVI complaint....and I was at
> qrp (ish) levels (ssb at less than 10 watts...need to calibrate the
> meter). 15m is the big problem...the only other thing that causes
> problems is 40, and I keep that below 5w which alleviates that
> problem.
>
> I guess it's time to gather up the interference pamphlets and offer
> to help solve the filtering probs...but this is not going to be fun...
> this lady hates us. OUr fault I spose...They are in the apartment
> below us so whenever our three year old is on the balcony and manages to

> knock over a plant or something, the spillover hits their patio. (She
> isn't actually allowed out there anymore, of course, but the lady
> downstairs has a long memory...the glass of water brittany spilled
> on her patio (bare concrete mind you...within a couple hours of it
> raining anyway) seems to have ticked her off)...ah well this should
> be fun...anyone have any particular recommendations for approaching
> the tvi problem?

I've got the same problem living in an apartment and attempting to
run a TS-820. I have a 64 foot folded dipole running along wall/roof
almost circling L shaped living/dining rooms.

I can get away with 10w on 40m CW. 5w pm 80m CW. 2w on 15m CW. And
forget about voice on 10m. (I'm tech+)

I've been looking into how to reduce TVI. Here are some fixes:

My TS820 rates harmonics reduced 40db, but books say for TVI it should
be more like 80db. Gonna get a low pass filter rated at least at 40db.

RF getting back into the AC line can be fixed with a AC filter.
I've got a "transient voltage protector" power strip made for my
computer. It also happens to filter 10mhz to 30db down.

I think a 1:1 balun will help keep RF off chassis and outside of coax,
but not sure ... got one anyway.

Gonna try to get a good ground, but have yet to get up courage
to beat a rod in the ground on apartment grounds.

Any other suggestions?

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: "Mark A. Andrews" <ke4iof@fly.hiwaay.net>
Subject: [2071] Re: It had to happen
Message-ID: <9512312007.AA01594@fly.HiWAAY.net>

> off)...ah well this should be fun...anyone have any particular
> recommendations for approaching the tvi problem?
>
> Dave
> /

Move...

(-------------------------)
(Mark A. Andrews, KE4IOF)
(Symetric, Incorporated)
("Anything Digital.."   )
(-------------------------)

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: charles1@netcom.com (charles copeland)
Subject: [2072] Re: It had to happen
Message-ID: <199512312022.MAA14143@netcom18.netcom.com>

> > off)...ah well this should be fun...anyone have any particular
> > recommendations for approaching the tvi problem?
> > Dave
>
> Move...
>
> (-------------------------)
> (Mark A. Andrews, KE4IOF)
> (Symetric, Incorporated)
> ("Anything Digital.."   )
> (-------------------------)

and move and move and move ...

Charles KC5LWF

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [2080] Re: New England QRP Club
Message-ID: <Pine.LNX.3.91.951231151425.19848A-100000@dt1.datatamers.com>

Roy,
Doug is out of town from Christmas until tomorrow, or so, visiting relatives.
He will probably answer you in a few days.
72, Dave, W6EMD

On Sun, 31 Dec 1995, Roy Boggs wrote:

> I appreciate the posting by Ernie Gregoire which tells how to get club info;
> however I've email-ed a request for info three times and still haven't got a
> response. What the heck's going on? Norcal, would you like a new member from KY?
>
> 72 es cu all tonite on SKN, Roy
>
> --
>   Roy Boggs KE4KDT   QRP-L #322
>   Prestonsburg, KY   rboggs@pcc-uky.campus.mci.net
> --
>
>
>

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: dyarnes@primenet.com (David Yarnes)
Subject: [2051] Re: QRP + cw
Message-ID: <199512310623.XAA28205@usr5.primenet.com>

At 09:52 AM 12/26/95 EST, William R Colbert wrote:
>
>
>A couple of things have come up using the Plus. One was mentioned
>a few weeks back by one of the Socorro, NM fellows - that when using
>an external keyer thru the manual key jack, the speed cannot exceed
>approximately 30 WPM or the Plus starts to cut out and gives only
>an occasional dit or dah. One local checked his and his started to
>malfunction at 28 wpm. My plus seems to cut out at approximately
>25 to 30 wpm (using the Heath HD1410 keyer) plus sometimes, it will
>not key at all. In addition, it will on occasion it will kick the
>microprocessor to some odd frequency such as 49.875 Mhz and then
>the VFO will tune between this freq and 7.999 Mhz. I guess my
>question for the Plus users is this - has anyone else noticed
>these problems, is there a simple solution? Also, has anyone
>with the older keyer chip received the updated one that gives
>the 1 WPM increments.
>Sorry to use all this space, but I thought I would ask some questions
>I don't remember seeing on here. Thanks, Ray
>
>--
>Ray, W5XE, El Paso, Tx/V31XE, Banana Bank, Belize
>QRP-ARCI,MI-QRP, NW-QRP, G-QRP, NORCAL QRP, QRP-L
>af852@rgfn.epcc.edu
>
Ray,

I think the first person to notice this was probably Chuck, W5UXH. Chuck likes to use his own keyers because he has some special features built into them. The problem is in the microprocessor, so it will have to be fixed by a factory mod. Chuck has had lots of promises from Bruce at Index Labs but no action to date as far as I know. I think we all may need to apply a little "heat" if we really want to see a fix.

72, de David W5RMZ>

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: NONE <wynnt@utkux.utcc.utk.edu>
Subject: [2083] Re: St. Louis Tuner Kit
Message-ID: <Pine.SOL.3.91.951231213206.1761B-100000@utkux1.utk.edu>

On Sat, 30 Dec 1995 16:58:45 EST adams@chuck.dallas.sgi.com (chuck adams) wrote:
>NorCal is now taking orders for the St. Louis Tuner which will
>be delivered in the Spring of 1996

On Sat, 30 Dec 1995 23:54:14 EST PaulKB8N@aol.com wrote:
>   ...as the article clearly
>shows, the other designs (with the exception of the inductive Tee, which is
>challenging to construct and tune) are lower efficiency designs.

>...harmonics and parasitics above the operating frequency are not suppressed.
>
>...parasitics and harmonics that are "received" by VCRs, televisions, and
>stereos. The Pi-Net, however, acts as a true bandpass filter, and
>attenuates spurs above and below the operating frequency.
>   High quality #16 or larger wire should be used for
>wiring and the inductor.
>   ...the Pi design is much more
>efficient over a wide variety of loads.
>Frankly, it scares the hell out of me when new tuner designs are introduced
>as the panacea for matching balanced and unbalanced loads under a wide range

On Sun, 31 Dec 1995 06:48:40 EST cebik@utkvx.utcc.utk.edu wrote:
>Paul,
>
>I can only reaffirm your remarks ...
>   In any ATU
>network, a variable inductor is as important as a variable capacitor for

>hitting the most desirable matching values. Switched inductor values, in
>this regard, are always compromises,...
>

Oops,
   I was about to set pen to paper and order one of the new St. Louis Tuners Kits based on Chuck's post. Then I saw Paul and Cebik's post and now am somewhat concerned. Thanks to them for giving the QRP-L list some hard criteria by which to evaluate tuners. I do not expect to get my QQ or QRPp until later in January. Perhaps those who have the subject QQ and QRPp's can help with these questions.

1. Does the St. Louis tuner design have a plexiglas case or wide
   spacing from metal?
2. Does the St. Louis tuner use #16 or larger silver plated wire?
3. Does the St. Louis tuner have a variable inductor?
4. Does the St. Louis tuner design use a Pi-Net config.?
5. Does the St. Louis design sustain component Q througout?
6. Will the St. Louis design stop unattenuated harmonics that otherwise
   are "received" by VCR's, televisions and stereos from many QRPers?
7. How does the "delta" compare on the St. Louis Tuner design?

Maybe Chuck, Paul, or cebik can enlighten us.

happy holidays,
wynnt

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: Jim Stafford-W4QO <w4qo@america.net>
Subject: [2062] Re: Telefuncken Radio tubes
Message-ID: <Pine.SV4.3.91.951231125001.9719A-100000@atl1>

On Sun, 31 Dec 1995, Alfred D. Jablonski wrote:

> My mom lives in Pheonix and her Telefuncken radio tubes need to be
> replaced. Where can she go? Or where can she order the 5-6 tubes?
> Thanks!

She couldn't live in a better location. Have her go out to Antique Electronic Supply at 6221 S. Maple Ave in Tempe or call them at 602.820.5411. They have a big supply of tubes and altho some of the codes may be different, I'll bet they can cross reference for her. I have been there and the folks are very helpful. I don't suspect there are more than 3 or 4 other places in the country with as good a stock of

tubes as AES, maybe none.

Living in Atanta, I don't work for AES or profit from this testimonial.

Jim Stafford, W4QO
11395 West Road
Roswell, GA 30075-2122
770-993-9500
Packet:W4QO@WA4BRO.#atl.ga.usa.na RadioActive Schools(sm) -
Using amateur radio as
a teaching tool in north
Georgia area schools.
Internet: w4qo@america.net

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [2043] Re: Toroid cores
Message-ID: <Pine.LNX.3.91.951230192231.13361D-100000@dt1.datatamers.com>

Dave,
I order mine directly from Amidon. They are helpful on the 'phone and
very fast shipping the cores. (310) 763-5770
72, Dave, W6EMD

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: WD6BOR@aol.com
Subject: [2047] Re: Toroid cores (where to buy)
Message-ID: <951230235830_81359515@emout04.mail.aol.com>

In a message dated 95-12-30 17:40:53 EST, dave@flowserver.stem.com (David
Adams) writes:

>
>Where does everyone order theirs? I was getting ready to put together
>an order from Mouser when I realized that they don't appear to carry
>them...
>
>73 de dave, n9uxu

Ocean State Electronics
POB 1458
6 Industrial Drive
Westerly, RI 02891 (good prices)

Palomar Engineering
POB 462222

Escondido, CA 92046 (good selection)

Amidon Associates
POB 956
Torrance, CA 90508 (good reference materials)

This is another good time to plug the ARRL Handbook (suppliers listed there). For $38 or $1gadzillion, this is the ham's first and best reference. Buy one before you buy another kit or used radio and you'll find answers for most of the construction, antenna, theory and operating questions you have about this hobby.

And yes I do own a part of the ARRL and profit from it's activities... as does any other dues paying member (as well as all the rest of the amateur radio operators around the world).

72, Darrel, WD6BOR

From qrp-l@lehigh.edu Sun Dec 31 21:16:16 1995
From: WD6BOR@aol.com
Subject: [2046] Re: want easy to build hf xmitter plans
Message-ID: <951230235824_81359483@mail06.mail.aol.com>

Justin,

I will recommend the ARRL Handbook, QRP Classics and W1FB's QRP Notebook for more projects than you could build in a very busy year. All books are underpriced for the treasury of information contained inside. Ordering information is in every issue of QST.

Printed circuit boards are availible for many of the circuits through FAR Circuits, 18N640 Field Court, Dundee, IL 60118.

72 and good building,

Darrel, WD6BOR